#6
7/7/03

Amendments to the Claims

I. Amendments

Please cancel claims 2-4, and 43-58 without prejudice or disclaimer, as directed to non-elected inventions.

II. The Claims of the Application

Claim 1. (**Original**) A method for enhancing the dynamic range of an assay of the presence, absence, activity or concentration of two or more target analytes in one or more samples wherein the presence, absence, activity or concentration of said target analytes is assayed by the emission or quenching of a light signal, wherein said method comprises the steps:

(A) conducting an assay for the presence, absence, activity or concentration of each of said target analytes in said one or more samples wherein said assays each cause light signals to be emitted or quenched;

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(B) employing a computer system comprising a CCD camera detector to detect said light signals, and to generate data corresponding to said detected signals; and

(C) causing said computer system to compare said generated data using data corresponding to the light signal generated by a known concentration of said target analyte in a known dynamic range of said assay and report the presence, absence, activity or concentration of said target analyte; wherein said computer system causes said CCD camera detector to independently detect sufficient light signal for each of said target analytes to ensure that said reported presence, absence, activity or concentration of each target analyte is determined using data corresponding to a light signal that is within said known dynamic range of said assay for that target analyte.

Claims 2-4. **(Withdrawn)**

Claim 5. **(Original)** The method of claim 1, wherein said method simultaneously assays the presence, absence, activity or concentration of two or more of said target analytes in said sample.

Claim 6. **(Original)** The method of claim 1, wherein said method sequentially assays the presence, absence, activity or concentration of two or more of said target analytes in said sample.

Claim 7. **(Original)** The method of claim 1, wherein said step (C) is performed simultaneously for each target analyte being assayed.

Claim 8. **(Original)** The method of claim 1, wherein said step (C) is performed sequentially for each target analyte being assayed.

Claim 9. **(Original)** The method of claim 1, wherein at least one of said target analyte is selected from the group consisting of an enzyme, a drug or metabolite, a co-factor, a receptor, a receptor ligand, a hormone, a cytokine, a blood factor, a virus, an antigen, a steroid, and an antibody.

Claim 10. **(Original)** The method of claim 9, wherein said assay assays the presence, absence, activity or concentration of an enzyme.

Claim 11. **(Original)** The method of claim 10, wherein said enzyme is selected from the group consisting of bone specific alkaline phosphatase, aldose reductase, myoglobin, and troponin I.

Claim 12. **(Original)** The method of claim 9, wherein said assay assays the presence, absence, activity or concentration of a drug or metabolite.

Claim 13. (**Original**) The method of claim 12, wherein said drug or metabolite is selected from the group consisting of: an anti-cancer drug, chemotherapeutic drug, anti-viral drug, non-steroidal anti-inflammatory drug (NSAID), steroidal anti-inflammatory drug, anti-fungal drug, detoxifying drug, analgesic, bronchodilator, anti-bacterial drug, antibiotic drugs, diuretic, digoxin, anti-metabolite, calcium channel blocker, drug for treatment of psoriasis, and a substance of abuse.

Claim 14. (**Original**) The method of claim 9, wherein said assay assays the presence, absence, activity or concentration of a co-factor.

Claim 15. (**Original**) The method of claim 14, wherein said co-factor is a vitamin, T3, or T4.

Claim 16. (**Original**) The method of claim 9, wherein said assay assays the presence, absence, activity or concentration of a cytokine.

Claim 17. (**Original**) The method of claim 16, wherein said cytokine is IL-1β, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-10, IL-12, IL-13, TNFα, VEGF, GMCSF, FGFβ, INFγ, EGF, PDGF, MCSF, SCF, insulin, VEGF, Trk, Met, Ron, Axl, Eph, Fas, CD40, CD30, CD27, 4-1BB, LNGFR, OX40, TGFβR, or is a ligand of CCR1, CCR2α, β, CCR3, CCR4, CCR5, CXCR1, CXCR2, CXCR3, CXCR4, BLR1, BLR2, or V28 receptor , or is a ligand of a receptor of IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-10, IL-12, or IL-13.

Claim 18. (**Original**) The method of claim 9, wherein said assay assays the presence, absence, activity or concentration of a receptor or receptor ligand.

Claim 19. (**Original**) The method of claim 18, wherein said receptor or receptor ligand is 4-1BB, Axl, BLR1, BLR2, CCR1, CCR2α, β, CCR3, CCR4, CCR5, CD27, CD30, CD4, CD4, CD40, CXCR1, CXCR2, CXCR3, CXCR4, EGFR, Eph,

EPO receptor, Fas receptor, GCSFR, GHR, GMCSFRα, gp130, IFNgRα, IFNgRβ, IFNαR1, insulin-R, IL-1β, IL-2R β, IL-2Rγ chains, IL-4Rα, IL-3Rα, IL-5Rα, IL-6Rα, IL-7Rα, IL-9Rα, IL-10R, IL-11Rα, IL-12Rb1, IL-12Rb2, IL-13Rα, GMCSFRα, IL-3/IL-5/GM-CSF receptor common β-chain, LIFR β, LNGFR, MCSFR, Met, OBR, OSMRβ, OX40, PDGFR, PRL, Ron, SCFR, TPOR, TFR, TGFβR, TNFRI, TNFRII, TPOR, Trk, V28, VEGFR

Claim 20. (**Original**) The method of claim 9, wherein said assay assays the presence, absence, activity or concentration of a hormone.

Claim 21. (**Original**) The method of claim 20, wherein said hormone is adrenaline, adrenocorticotropic hormone, testosterone, angiotensinogen, antidiuretic hormone, atrial-natriuretic peptide, calcitonin, calcitriol, cholecystokinin, chorionic gonadotropin, cortisol, dopamine, erythropoietin, estradiol, follicle-stimulating hormone, gastrin, glucagon, gonadotropin-releasing hormone, gorticotropin-releasing hormone, growth hormone, growth hormone-releasing hormone, insulin, insulin-like growth factor-1, leptin, luteinizing hormone, melatonin, aldosterone, neuropeptide Y, noradrenaline, oxytocin, parathyroid hormone, progesterone, prolactin, renin, secretin, somatostatin, theophylline, thiiodothyronine, thrombopoietin, thyroid-stimulating hormone, thyrotropin-releasing hormone, or thyroxine.

Claim 22. (**Original**) The method of claim 9, wherein said assay assays a binding activity of an antigen or an antibody.

Claim 23. (**Original**) The method of claim 22, wherein said assay assays a binding activity of an antigen characteristic of *Chlamydia*, *Streptococcus pyogenes* Group A bacteria, *H. pylori*, or *M. tuberculosi*, hepatitis virus, rubella, CMV, HIV, FIV, or prostate specific antigen, or an antibody elicited in response to any of such antigens.

Claim 24. (**Original**) The method of claim 9, wherein said assay assays a binding activity of an autoimmune immunoglobulin, thyroglobulin, anti-thyroglobulin, IgE, IgG, or IgM immunoglobulin.

Claim 25. (**Original**) The method of claim 9, wherein said assay assays a binding activity of a tumor marker.

Claim 26. (**Original**) The method of claim 1, wherein said light signal is an evolution or loss of a fluorescent light signal.

Claim 27. (**Original**) The method of claim 1, wherein said light signal is an evolution or loss of a chemiluminescent light signal.

Claim 28. (**Original**) The method of claim 1, wherein said light signal is an evolution or loss of an ultraviolet light signal.

Claim 29. (**Original**) The method of claim 1, wherein said light signal is an evolution or loss of a visible wavelength light signal.

Claim 30. (**Original**) The method of claim 1, wherein said assays are conducted in a multi-well microtiter plate.

Claim 31. (**Original**) The method of claim 1, wherein a target analyte has an activity and wherein said computer system additionally calculates the rate of activity of said target analyte in said sample.

Claims 32-62. ~~(**Withdrawn**)~~ Canceled (see paper # 4)

G.C. 07/23/03